Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work : Drilling of borewells and construction of RO plants comes under Shivakote, Kasagattapura, vaderapura and singanayakanahalli grama panchayathi Limits

Sl. No	Description		No	L	B	D	Qty	Rate	Amount
1	Earth work excavation for foundation of building, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depyh including the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specification No. KBS 2.1 (b)/ 2.3.5 PWD SR 2018-19 It No.2.4 Pg. No.6								
	Basic Rate		449.00						
	Area Weightage 3%		13.47						
	Total		462.47						
	For Columns	6	4	1.20	1.20	1.20	41.47		
	Long walls	6	2	7.13	0.75	1.00	64.17		
	Short walls	6	2	2.33	0.75	1.00	20.97		
						Cum	126.61	462.47	58554.25
2	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2.PWD SR 2018-19 It No.4.2 Pg. No.13								
	Basic Rate		5194.00						
	Area Weightage 3%		155.82						
	Total		5349.82						
	For Columns	6	4	1.20	1.20	0.15	5.18		
	Long walls	6	2	7.13	0.75	0.15	9.63		
	Short walls	6	2	2.33	0.75	0.15	3.15		
	Flooring	6	1	5.17	2.65	0.15	12.33		
						Cum	30.29	5349.82	162021.71
3	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:8, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 PWD SR 2018-19 It No.5.5 Pg. No.25								
	Basic Rate		4494.00						
	Area Weightage 3%		134.82						
	Total		4628.82						
	1nd Footing								
	LW	6	2	6.83	0.60	0.60	29.51		
	SW	6	2	2.63	0.60	0.60	11.36		
						Cum	40.87	4628.82	189166.91
4	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 PWD SR 2018-19 It No.5.6 Pg. No.25								
	Basic Rate		4596.00						

	Area Weightage 3%		137.88						
	Total		4733.88						
	Basement								
	SSM LW	6	2	6.83	0.45	0.45	16.60		
	SW	6	2	2.63	0.45	0.45	6.39		
						Cum	22.99	4733.88	108821.00
5	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, HOM curing complete as per specifications.PWD SR 2018-19, It No.34.12.1								
	Basic Rate		141.00						
	Area Weightage 3%		4.23						
	Total		145.23						
	Basement								
	SSM LW	6	2	6.83		0.45	36.88		
	SW	6	2	2.63		0.45	14.20		
						Sqm	51.08	145.23	7419.00
6	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregtes @ 0.47cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintles and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, ,pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 PWD SR 2018-19 It No.4.12Pg. No.14								
	Basic Rate		6045.00						
	Area Weightage 3%		181.35						
	Total		6226.35						
	For Footing	6	4	1.20	1.20	0.30	10.37		
	For column	6	4	0.23	0.30	5.95	9.85		
	Plinth Beam	6	2	6.10	0.23	0.30	5.05		
		6	2	2.65	0.23	0.30	2.19		
	Roof Beam	6	2	6.10	0.23	0.30	5.05		
		6	2	4.06	0.30	0.23	3.36		
	For slab	6	1	6.10	4.06	0.15	22.29		
	For lintel	6	2	6.10	0.20	0.15	2.20		
		6	2	2.65	0.20	0.15	0.95		
						Cum	61.32	6226.35	381788.00
7	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - TMT bars Fe 500 Specification No.KBS 4.6.3 PWD SR 2018-19 It No.4.46.2Pg. No.18								
	Basic Rate		70966.00						
	Area Weightage 3%		2128.98						
	Total		73094.98						
			Nos	Qty	Kg/cum	Kgs			
	For footings @ 60 Kg/ Cum	6	1	10.37	60	3732.48			

	For Columns @ 90 Kg/ Cum	6	1	9.85	90	5320.728			
	For Beams @ 90 Kg/ Cum	6	1	3.11	90	1679.4			
	For slabs @ 90 Kg/ Cum	6	1	4.91	90	2651.4			
	For Lintel @ 50 Kg/ Cum	6	1	0.63	50	189			
						13573.008			
						Ton	13.57	73094.98	992118.75
8	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 PWD SR 2018-19 It No.4.31Pg. No.16								
	Basic Rate		358.00						
	Area Weightage 3%		10.74						
	Total		368.74						
	For Footting	6	4	4.80		0.30	34.56		
	For column	6	4	1.06		5.95	151.37		
	Plinth Beam	6	4	6.10		0.30	43.92		
		6	4	4.06		0.30	29.23		
	Lintel	6	2	6.10		0.15	10.98		
		6	2	2.65		0.15	4.77		
	Roof Beam	6	4	6.10		0.30	43.92		
		6	4	4.06		0.30	29.23		
	For slab	6	1	6.10		4.06	148.60		
						Sqm	496.58	368.74	183108.00
9	Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 **PWD SR 2018-19 It No.5.26.1Pg. No.27**								
	Basic Rate		912.00						
	Area Weightage 3%		27.36						
	Total		939.36						
	L.W	6	1	7.46		3.60	161.14		
		6	1	7.46		3.90	174.56		
	S.W	6	1	3.00		3.60	64.80		
		6	1	3.00		3.90	70.20		
	Deduction								
	RS	6	-1	2.60		2.50	-39.00		
	W	6	-1	1.20		1.20	-8.64		
						Sqm	423.06	939.36	397406.00
10	Providing 12mm thick cement plaster in single coat with cement mortar 1:4, to ceiling including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.**PWD SR 2018-19 It No.15.22Pg. No.116**								
	Basic Rate		225.00						
	Area Weightage 3%		6.75						
	Total		231.75						
	For ceiling	6	1	5.70	2.65		90.63		
						Sqm	90.63	231.75	21004.00

11	Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.**PWD SR 2018-19 It No.15.9Pg. No.115**								
	Basic Rate		211.00						
	Area Weightage 3%		6.33						
	Total		217.33						
	Inside Plastering								
	LW								
		6	1	5.70		3.60	123.12		
		6	1	5.70		3.90	133.38		
	SW	6	1	2.65		3.60	57.24		
		6	1	2.65		3.90	62.01		
	Deduction								
	RS						0.00		
	W	6	-1	2.60		2.50	-39.00		
		6	-1	1.20		1.20	-8.64		
						Sqm	**328.11**	**217.33**	**71308.00**
12	Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. .**PWD SR 2018-19 It No.15.17Pg. No.116**								
	Basic Rate		245.00						
	Area Weightage 3%		7.35						
	Total		252.35						
	External Plastering								
	LW								
		6	1	6.10		3.60	131.76		
		6	1	6.10		3.90	142.74		
	SW	6	1	3.05		3.60	65.88		
		6	1	3.05		3.90	71.37		
	Steps								
	Tread	6	1	0.30		4.20	7.56		
	Rise	6	1	0.15		4.20	3.78		
	Deduction								
	RS	6	-1	2.60		2.50	-39.00		
	W	6	-1	1.20		1.20	-8.64		
						Sqm	**375.45**	**252.35**	**94745.00**
13	Providing and fixing Special make glazed Vitrified tiles (Granomite finish) of approved make, quality and colour of size 600x600x10mm thick fixed on existing flooring with a special roffe adhesive for flooring and skirting etc., complete including providing spears at required interval and removing stains etc., complete.)**PWD SR 2018-19 It No.14.43Pg. No.109**								
	Basic Rate		1099.00						
	Area Weightage 3%		32.97						
	Total		1131.97						
	Flooring								
		6	1	5.70	2.65		90.63		
						Sqm	**90.63**	**1285.20**	**116478.00**
14	Providing skirting, dado, rises of steps with colour glazed tiles on 10mm thick cement plaster 1:3 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface which should be measured and paid separately) using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications. Specification No.KBS 14.16, 14.17 - Colour glazed tiles 30x60 cms 6mm thick with border of size 30 x 10 cms. **PWD SR 2018-19 It No.14.41.2 Pg. No.108**								
	Basic Rate		1632.00						

	Area Weightage 3%		48.96						
	Total		1680.96						
	Dadoing								
		6	2	5.70		0.30	20.52		
		6	2	2.65		0.30	9.54		
	Deduction	6	-1	2.60		0.30	-4.68		
						Sqm	25.38	1680.96	42663.00
15	Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations complete including pulling hooks, 4Nos. handles with all fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as per specifications. Shutter size 3mx2.8 m. Specification No. KBS 7.10 / 7.12. **PWD SR 2018-19 It No.7.5 Pg. No.33**								
	Basic Rate		2607.00						
	Area Weightage 3%		78.21						
	Total		2685.21						
	Rolling Shutter	6	1	2.60	2.10		32.76		
						Sqm	32.76	2685.21	87967.00
16	Providing and applying two coats with oil bound washable distermper Two Coats of distemper of approved brand and shade on Ceilling & sloped roof including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications.**PWD SR 2018-19, It No.15.49.1 Pg No.119**								
	Basic Rate		110.00						
	Area Weightage 3%		3.30						
	Total		113.30						
	Qty Same as Internal Plastering						328.11		
						Sqm	328.11	113.30	37175.00
17	Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. **PWD SR 2018-19 It No.15.53.1 Pg. No.120**								
	Basic Rate		89.00						
	Area Weightage 3%		2.67						
	Total		91.67						
	Qty Same as External Plastering						375.45		
						Sqm	375.45	91.67	34418.00
18	KSRB 7.9: Providing and fixing M.S Grill work for windows and ventilators using M.S flats or M.S fsquare rods or combination of M.S flat and square rods as per approved deisgn, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materail, fixtures, labour and HOM of machinery complete as per specification. Specification No:KBS 7.12 **(P.No:34 Items No:7.9 of PWD SR 2018-19)**								
	Basic Rate		95.00						
	Area Weightage 3%		2.85						
	Total		97.85						
	W	6	1	1.20		1.20	8.64		
							181.44		

						kgs	181.44	97.85	17753.90
19	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - 32mm nominal OD pipes **PWD SR 2018-19 It No.13.77 Pg. No.96**								
	Basic Rate		129.00						
	Area Weightage 3%		3.87						
	Total		132.87						
		6	1	30.00			180.00		
						Rmt	180.00	132.87	23917.00
20	Providing, fabricating, assembling and fixing in position aluminium partitions using aluminium sections of mat finish or glassy finish in combination of plain grove, single grove and double grove as per requirements for the frames of overall size 63.5mm x 38.1mm. with thickness of 2mm. having section weight, plain sections 1.054kg/m, single grove thickness 1.95mm. section weight 1.094kg/m, double grove thickness 1.9mm section weight 1.094kg/m and bottom member 114.3 mm. x 44.45mm. thickness 3.18mm. weight 2.646 kg/m; aluminium louvres section of size 36.5mmx34.93mm 1.45mm. thick section weight 0.429kg/m; bottom portions provided with 12mm. thick prelaminated sheet both sides of approved colour lamination exterior grade upto 0.9m height, spacing of vertical member not exceeding 0.6 m. c to c; sections are cut to the required lengths, joints mitered and suitable sized holes and fixing with cement mortar, with necessary opening for fixing of door of standard size (excluding cost of door) all the frame throughly cleaned, free from rust, scale or dirt including cost of materials, fixtures, labour and HOM of machinery complete as per specifications. using aluminium section powdered coated to a minimum of 60-70 microns with exterior durable pure polyester grade powder of approved								
	Basic Rate		3364.00						
	Area Weightage 3%		100.92						
	Total		3464.92						
		6	1	2.60	2.70		42.12		
		6	1	1.20	1.20		8.64		
						Sqm	50.76	3464.92	175879.00

	DESIGN, SUPPLY, INSTALLATION, COMMISIONNING OF RO PLANT 2000LTR PER HOUR CAPACITY WITH RO PLANT-2000LPH WITH COIN BOOTH								
21	1.Raw Water pump Qty officer-one number type Mon Block centrifugal operation flow rate -4M3hr operation pressure.4.0kg/cm2 type of drive- phase squirred cage induction motor make-CRI/TEXmo 2.Multigrated sand filter (MSF) Qty offere-one number Type -Top and bottom flow size 15"x65" operation floe rate-4M3/hr Operation pressure-4.0kg/cm2 Type of Modia-Dual-Sand and anthracite Supporting media-Gravels and Silex MOC of shell-FRP Make PARTNER/Aventura 3.Activated Carbon filter (ACF)Qty Offere -one Number Type Top and bottom flow size 16"x65" operation flow rate-4M3/hr operation pressure-3.5kg/cm2 type of Media Activated carbon flakes Type of resin-150kgs MOC of shell-FRP make -PARTNER/Aventura JODINE VALUE-500value 4.Micro Cartridge Filter Nos 5.Antiscalent Dosing UntilQty Offere -one number 6.Multistage Centrifugal pumo high pressure pump Qty Offe-one nos Type-Multistage Centrifugal Operation flow rate-4M3/hr operation pressure-10 to 15kg/cm2 material of construction -SS 316 Make pump-Cri/Kirloskar/unique Type of drive motor-three phase,squired cage indicator KWRPM-2.75/2000(Approx) Make of motor cri/kirloskar 7.R.O Membrane skid consists of (SS 304) a.R.O Membrane b.pressure tubes number of streams offered one type of membrane-spiral wound TFC brackish water membrane-imported make HYDRONTICS/OE marlin 8040 operating pressure -10 to 15kg/cm2 material of construction polumade thin film composite material of housing-FRP 8.Mineral Dosing system (product water storage tank) Qty Required no-s material of construction-SS 304 Capacity-1000Ltrs 9.Micron Cartridge module 2/1/0.5 Micron nos of cartridges-two nos type disposable Cartridge operating flow rate-3.00kg/cm2 microne Rating-2/1/0.5Micron MOC OF HOUSING Fiber MOC of cartridge-polypropylene 10.System control pane 11.RO Reject Line 12.1000 ltrs SS storage tank 304 food grade13.coin both with optional coin 14.Control panel consist og 15.a.Flow Meters 16.B.Pressure monitors 17.c.Online conductivity/ph meter 18.d.Sampling tap 19.e. Operation switches 20.Basis of design 21.Raw water characteristics 22.PH 6 to 8 23.Total suspended solids-nil 24.Total dissolved solids-2000 25.Iron AS Fe<1 26. Total Hardness as Caco3-1000 27.Total Alkalinity as CaCo3-250 28.Total Alkalinity as Caco3-250 28.Alkalinity as CaCo3-nil. 29.Chloride as CaCo3-<200. 30.Fluoride-<1 31.Sulphate as CaCo3-25.								
			6				6.00		
						Each	6.00	975,814.80	5,854,888.80
	ELECTRICAL WORKS								
	Open Conduit System								
22	supplying heavy gauge pvc conduit pipe... dia confirming to IS 2509 with suitable size benda. Junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plugs in case of brick walls and cement plastering dameged portion using havey gauge saddles at an intereval of 70mm using NF screws **(ELE SR 2019-20 Page-2, Item-1.1.2)**								
	25mm dia 2mm thick Concealed Conduit System	6	28			mtr	168	65.00	10920.00
23	Suppling... mm dia 2mm/2.5mm thick heavy gauge PVC conduit pipe with suitable size bends, metal/PVC junction boxes adhesive paste etc..., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures. run with 18SWG GI fish wire wherever necessary.**(ELE SR 2019-20 Page-2, Item-1.2.2)**								
	25mm dia 2mm thick	6	28			mtr	168.00	53.00	8904.00
24	Groove cutting in the wall suppling.. Dia 2mm/2.5mm thick heavy gauge PVC Conduit pipe with bends, metal junction boxes adhesive paste etc., and bracing U or J hooks and cement plastering up to the surface of the brick level and run with 18 SWG GI fish wire run through out conduit wherever necessary.**(ELE SR 2019-20 Page-2, Item-1.3.2)**								
	25mm dia 2mm thick	6	23			mtr	138.00	54.00	7452.00

25	Supplying and fixing sheet metal box made out of 18 SWG sheet metal with necessary holes for cable/conduit entry as required with one coat of approved make etc.,.(ELE SR 2019-20 Page-2, Item-1.4.5)								
	200x90x65mm	6	3			Each	18.00	111.00	1998.00
26	supplying and fixing PVC/ Metal conduit accessories. (3/5) (ELE SR 2019-20 Page-3, Item-1.5.3)								
	a)32mm deep junction box	6	1			Each	6.00	60.00	360.00
27	Suppling and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, necessary masonry patch work complet. (ELE SR 2019-20 Page-3, Item-1.6.1-1.6.8)								
	12"x12"x3"(330x300x76mm	6	10			mtr	60.00	102.00	6120.00
28	Suppling and wiring adopting loop system in existing PVC Conduit/ casting capping using copper PVC insulated multi strand 2x1.5sqmm copper wire with a 6 Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box. The outher end of the wires shall be terminated with sufficient loose lenght in a wood / PVC round block. compelete for each outlet. (ELE SR 2019-20 Page-5, Item-2.1.2)								
	Medium point above 3Mtr up to 6 mtr from tapping point to out let via switch					Each	12	275.00	3300.00
29	Suppling and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos, of machines screws, bolts nuts etc., complete on the existing metal/PVC box,ELE SR 2019-20 Page-9, Item-3.5.3)								
	Group-A								
	Moudule	6	5			No	30	175.00	5250.00
30	Supplying and fixing of 32 Amps security and energy saving DP switch with key tag suitable to operate on 230 volts, 50Hz AC supply and completely wired on existing box. ELE SR 2019-20 Page-10, Item-3.7)								
	Group 'A'	6	2			Each	12	680.00	8160.00
31	Wiring for lighting/power circuit using one of pvc insulated 1100v grade, multistrand copper conductor singal core cable in open or concealed system of wiring.ELE SR 2019-20 Page-5, Item-2.3.1-2.3.7)								
	1. Group-A								
	a)1.5sqmm		6	86		mtr	516	20.50	10578.00
	b)6 sqmm		6	79		mtr	474	70.00	33180.00
32	Supplying and fixing of PVC casing and capping on the wall or ceilng using necessary materials like bends, screws at an interval of 300mm... Etc as required. ELE SR 2019-20 Page-3, Item-1.8.1)								
	20mm	6	15			Each	90.00	22.00	1980.00
33	Supplying PVC/GI Flexible conduit pipe.. Mm dia fixing on surface over inverted wooden pugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and either end of the pie terminated completely. ELE SR 2019-20 Page-3, Item-1.9.1)								
	20mm	6	16			Each	96.00	22.00	2112.00
34	Extra for supplying 4mm thick white plastic plate and covering for junction boxes of size 110mm conduit using necessary machine screws.. ELE SR 2019-20 Page-10, Item-3.10.2)								
	110mm	6	16			Each	96.00	11.00	1056.00

35	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - 20mm nominal OD pipes. **(P.No.99, I.No. 13.86.2 of PWD SR 2018-19)**								
	Basic Rate		235.00						
	Area Weightage 3%		7.05						
	Total		242.05						
			6	55		Rmt	330	242.05	79876.50
36	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.47, I. 9.4) PRED.SR 2019-20**								
	Basic Rate	3768.0							
			11				11.00	3768.00	41448.00
37	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2019-20**								
	Basic Rate	347.00							
	0 to 50 m		11	50.00			550.00	347.00	190850.00
	Basic Rate	442.00							
	50 to 100 m		11	50.00			550.00	442.00	243100.00
	Basic Rate	456.00							
	100 to 150 m		11	50.00			550.00	456.00	250800.00
	Basic Rate	536.00							
	150 to 200 m		11	50.00			550.00	536.00	294800.00
	Basic Rate	634.00							
	200 to 250 m		11	50.00			550.00	634.00	348700.00
	Basic Rate	700.00							
	250 to 300 m		11	50.00			550.00	700.00	385000.00
38	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (Including of all taxes) **SE PRED III NO 84**								
		Rmtr	11	50.00			550.00	1325.00	728750.00
39	Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6 (P. No.92/ I. No. 13.15 KPWD SR 2018-19)								
	Basic rate	388.00							
	Area Weightage 3%	11.64							
	Total	399.64							
		mtr	11	285.00			3135.00	399.64	1252871.40

40	Providing 250mm dia PVC Pipe **BWSSB SR 17-18 PNO 133 SL NO 1.11**									
		Rmtr								
			11	12.00				132.00	1353.00	178596.00
41	Providing 175mm dia ms casing cap **page no III it no 85 pred 12-13 sr**									
		no	11					11.00	100.00	1100.00
42	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990. **P. No. 7/ I No. (2.6.4) 3cx 6.0 Sqm KPWD Electrical SR 2019-20**									
		Mtr	11	580.00				6380.00	205.00	1307900.00
43	Atalanta,Suguna,CRI KIRLOSKER AND other equipment pumps 15.00 HP/11KW(30 Stage)P. No. XLII I No.43) (K.P.W.D SR 2018-19)									
		Nos	11					11.00	63498.00	698478.00
44	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia **(P No.40, I No. 6.1) KPWD Electrical SR 2019-20**									
		NO	11					11.00	2999.70	32996.70
45	Supplying and Fixing 20"x20"x2.5"polished wood board made up not less than 15mm thick plank with front plank one end providing for olding at other end fixing the same to the valve using tapered bolts and nuts, (P No. 24 No.5.6.6 KPWD Electrical SR 2019-20)									
		Each	11					11.00	292.00	3212.00
46	Supplying of 1.1 KV LT UG cable having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp (2CX 10Sqm.mm wire armoured) confirming IS 3975;1990(no.of strip indicated i GTP) AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group.A.4 Core 16Sqmm.P No.40/ I No.6.4.4 (4 core 16 Sqmm) KPWD Electrical SR 2019-20									
		Mtr	11	30.00				330.00	150.00	49500.00
47	Labour charges for laying of 1.1 K.V class UG cable, in existing trench GI Pipe / stoneware pipe /on wall/on poles as required In existing trencg/duct 6 Sqmm to 16 Sqmm)P No. 41 / I No. 6.5.1 KPWD Electrical SR 2019-20									
		Mtr	11	25.00				275.00	11.88	3267.00
48	Supplying and fixing of procelin fuse channel with e on existing wooden / panel using necessary nuts, bolts and washers , 63 Amps **(P No. 44 / I No. 5.7.3 KPWD Electrical SR 2019-20)**									
		Each	11					11.00	227.00	2497.00
49	Providing and fixing in position 50mm nominal bore non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications **(Page No.95 Item No. 13.62 / PWD SR 2018-19)**									
	Basic rate	1269.00								
	Area Weightage 3%	38.07								
	Total	1307.07								
		Nos	11					11.00	1307.07	14377.77
50	Supplying and fixing maniature circuit breakers on existing MCB Distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, Energy cross -3 with short circuit breaking capacity of 10K And Completed wiring confirming to IEC 60898 50-63 Amps TPN **(P. No. 27 I No.5.17.9) KPWD Electrical SR 2019-20**									
		Each	11					11.00	2397.00	26367.00

51	KSRB 2-2 : Earthwork excavation by manual means for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. **(P. No.6/ I No 2.3 PWD SR 2018-19)**									
	Basic rate	299.00								
	Area Weightage 3%	8.97								
	Total	**307.97**								
		Cum	11	355.00	0.60	0.70	**1640.10**	**307.97**	**505101.60**	
52	Supplying PVC ring tight pipes conformin to IS 4980 :2000 With latest amendments and conveying to work site rolling and lowering into trenches laying true line level and prefect linking at joints testing and commissoning incuding loading and un loading at both destinations and cuts of pipes wherever neccessary including joints of PVC pipes and specificals (excluding cost of pipes)with jointing of approvel type with all labour with all lead and lift incuding encasing the pipe alround to adepth of not less then 15cms with soft gravel or selected earth availble from the excavation etc.., completed and giving necessary hydralic test to the required pressure as per IS (Contractor will make his own arrangement for procuring water for testing)(P. No.133 I No 1.4 BWSSB SR 2018-19) **63mm outer dia, 6kg/sqcm & class 5**									
		Mtr	11	355.00			**3905.00**	**122.00**	**476410.00**	
53	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. includingcost of all labour complete as per specifications. P. No. 7.1/ I No. (2.11) KPWD SR 2018-19									
	Basic rate	121.00								
	Area Weightage 3%	3.63								
	Total	**124.63**								
		Cum	11	355.00	0.60	0.70	**1640.10**	**124.63**	**204405.66**	
54	Supplying fully automatic **star-delta starter** unit push button type with suitable wires, 3 contactors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts 3 phase and wired after fixing to the existing wooden board for motor.Above 12.5 HP upto 25 HP (P No. 24 / I No.5.2.2 KPWD Electrical SR 2019-20)									
		Nos	11				**11.00**	**8000.00**	**88000.00**	
56	BESCOM Deposite Charges	Nos	17				**17.00**	**14000.00**	**238000.00**	
								Total Construction Cost	**16806375.00**	
								Towards GST 12%	**2016765.00**	
								Tender premiun 5%	**840318.75**	
								DPR and PMC Charges 2%	**335000.00**	
								Sub Total	**19998458.75**	
								Utility Shifting,Miscellaneous and Rounding off	**1,541.25**	
								GRAND TOTAL	**20000000.00**	

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019, PRED, BWSSB, KPWD Electrical SR for year 2018-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer,

Executive Engineer,
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains and construction of Concrete roads at Avalahalli village Limits.

Est Cost: 100.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Avalahalli								
	Circle to Dead Rd, RHS		1	180.00	1.00	1.00	180.00		
	Akkannnappa house Rd		1	93.00	1.00	1.00	93.00		
	Madhusudhan House Rd		1	50.00	1.00	1.00	50.00		
	Circle to Temple LHS		1	80.00	1.10	1.00	88.00		
	Munihanumayya house Rd		1	42.00	1.00	1.00	42.00		
	Hanumegowda House Rd		1	175.00	1.00	1.00	175.00		
	Reethika Farm		1	110.00	2.20	1.20	290.40		
	Rain Water Harvesting pits		5	0.31		1.80	2.79		
	Culvert		5	5.00	1.40	1.00	35.00		
							956.19	**216.50**	**207015.14**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	2651.00							
	c) Coarse sand.	Cum	5	0.31		0.30	**0.47**	**2651**	**1,232.72**
	Data rate	2651.00							
	d) Fine Sand	Cum	5	0.31		0.20	**0.31**	**2651**	**821.81**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	5	0.31		0.30	**0.47**	**1901**	**883.97**

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains and construction of Concrete roads at Avalahalli village Limits.

Est Cost: 100.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Avalahalli								
	Circle to Dead Rd, RHS		1	180.00	1.00	1.00	180.00		
	Akkannnappa house Rd		1	93.00	1.00	1.00	93.00		
	Madhusudhan House Rd		1	50.00	1.00	1.00	50.00		
	Circle to Temple LHS		1	80.00	1.10	1.00	88.00		
	Munihanumayya house Rd		1	42.00	1.00	1.00	42.00		
	Hanumegowda House Rd		1	175.00	1.00	1.00	175.00		
	Reethika Farm		1	110.00	2.20	1.20	290.40		
	Rain Water Harvesting pits		5	0.31		1.80	2.79		
	Culvert		5	5.00	1.40	1.00	35.00		
							956.19	**216.50**	**207015.14**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	5	0.31	0.40	**0.62**	**1901**		**1,178.62**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	5	0.31	0.40	**0.62**	**1901**		**1,178.62**
	Data rate	2651.00							
	c) Coarse sand.	Cum	5	0.31	0.30	**0.47**	**2651**		**1,232.72**
	Data rate	2651.00							
	d) Fine Sand	Cum	5	0.31	0.20	**0.31**	**2651**		**821.81**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	5	0.31	0.30	**0.47**	**1901**		**883.97**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
3	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0, 630 mm dia.** (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	Basic rate	12121.00							
	Deduct 12% GST	1298.68							
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		5	1.80			9.00		
							9.00	**10822.32**	**97,400.88**
4	**Providing of Geonets** for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	5	0.31			**1.55**	**71.03**	**110.10**
5	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. specification. No. KBS 2.10.2 (P.No-7,I No-2.15)								
	Basic rate	2429.00							
	Area Weightage 3%	72.87							
	Total	**2501.87**							
	CC Drain	**Cum**							
	Avalahalli								
	Reethika Farm		1	110.00	2.20	0.20	48.40		
							48.40	**2501.87**	**121090.51**
6	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
	CC Drain	**Cum**							
	Avalahalli								
	Circle to Dead Rd, RHS		1	180.00	1.00	0.15	27.00		
	Akkannnappa house Rd		1	93.00	1.00	0.15	13.95		
	Madhusudhan House Rd		1	50.00	1.00	0.15	7.50		
	Circle to Temple LHS		1	80.00	1.10	0.15	13.20		
	Munihanumayya house Rd		1	42.00	1.00	0.15	6.30		
	Hanumegowda House Rd		1	175.00	1.00	0.15	26.25		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							135.75	5349.82	726238.07
7	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							
	Area Weightage 3%	200.10							
	Total	**6870.10**							
	CC Drain Raft	**Cum**							
	Avalahalli								
	Circle to Dead Rd, RHS		1	180.00	0.75	0.15	20.25		
	Akkannnappa house Rd		1	93.00	0.75	0.15	10.46		
	Madhusudhan House Rd		1	50.00	0.75	0.15	5.63		
	Circle to Temple LHS		1	80.00	0.90	0.15	10.80		
	Munihanumayya house Rd		1	42.00	0.75	0.15	4.73		
	Hanumegowda House Rd		1	175.00	0.75	0.15	19.69		
	CC Drain Wall								
	Avalahalli								
	Circle to Dead Rd, RHS		2	180.00	0.15	0.60	32.40		
	Akkannnappa house Rd		2	93.00	0.15	0.60	16.74		
	Madhusudhan House Rd		2	50.00	0.15	0.60	9.00		
	Circle to Temple LHS		2	80.00	0.15	0.60	14.40		
	Munihanumayya house Rd		2	42.00	0.15	0.60	7.56		
	Hanumegowda House Rd		2	175.00	0.15	0.60	31.50		
							183.15		
	Reethika Farm Raft		1	110.00	2.00	0.20	44.00		
	Reethika Farm Wall		2	110.00	0.20	1.50	66.00		
	Reethika Farm Slab		1	110.00	2.00	0.20	44.00		
	Culvert Raft		5	5.00	1.20	0.20	6.00		
	Culvert Wall		10	5.00	0.23	0.60	6.90		
							166.90		
							350.05	**6870.10**	**2404878.51**
8	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	**Tn**	1	183.15	60.00		10989.00		
	Consider 90kg/Cum for Drain	**Tn**	1	166.90	90.00		15021.00		
							26010.00		
							26.01	**70279.99**	**1827982.54**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
9	Providing and laying **100mm thick pre-cast cover slabs** over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM of machineries, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500, 1700. (P.No-272 ,I No-37.66 of PWD BCSR 2018-19),								
	Basic rate	1081.00							
	Area Weightage 3%	32.43							
	Total	**1113.43**							
	CC Drain Top Covering Slab	**m**							
	Avalahalli								
	Circle to Dead Rd, RHS		1	180.00			180.00		
	Akkannnappa house Rd		1	93.00			93.00		
	Madhusudhan House Rd		1	50.00			50.00		
	Munihanumayya house Rd		1	42.00			42.00		
	Hanumegowda House Rd		1	175.00			175.00		
							540.00	**1113.43**	**601252.20**
10	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting , including form work, cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	CC Drain Top Covering Slab	**Sqm**							
	Avalahalli								
	Circle to Temple LHS		1	80.00	0.90		72.00		
							72.00	**2337.00**	**168264.00**
11	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	**5418.00**							
	Culverts	**Sqm**	5	5.00	1.20		30.00		
							30.00	**5418.00**	**162540.00**
12	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
		Cum							
	Avalahalli								
	Akkannnappa house Rd		1	70.00	2.80	0.30	58.80		
	Front of Ranga Mandira		1	27.00	23.00	0.30	186.30		
	Arkeshwara Temple Platform		1	10.00	10.00	0.30	30.00		
	Hanumegowda House Rd		1	175.00	3.50	0.30	183.75		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
13	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147)								
	Basic rate	6.00							
	Area Weightage 3%	0.18							
	Total	**6.18**							
		Sqm							
	Avalahalli								
	Akkannnappa house Rd		1	70.00	2.80		196.00		
	Front of Ranga Mandira		1	27.00	23.00		621.00		
	Arkeshwara Temple Platform		1	10.00	10.00		100.00		
	Hanumegowda House Rd		1	175.00	3.50		612.50		
							1529.50	**6.18**	**9,452.31**
14	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	**3692.55**							
		Cum							
	Avalahalli								
	Akkannnappa house Rd		1	70.00	2.80	0.15	29.40		
	Front of Ranga Mandira		1	27.00	23.00	0.15	93.15		
	Arkeshwara Temple Platform		1	10.00	10.00	0.15	15.00		
	Hanumegowda House Rd		1	175.00	3.50	0.15	91.88		
							229.43	**3692.55**	**847163.28**
15	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Avalahalli								
	Akkannnappa house Rd		1	70.00	2.80	0.15	29.40		
	Front of Ranga Mandira		1	27.00	23.00	0.15	93.15		
	Arkeshwara Temple Platform		1	10.00	10.00	0.15	15.00		
	Hanumegowda House Rd		1	175.00	3.50	0.15	91.88		
							229.43	**5063.48**	**1161688.90**
16	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 3%	12.87							
	Total	**441.87**							
		Sqm							
	Avalahalli								
	Akkannnappa house Rd		2	70.00	0.10		14.00		
	Front of Ranga Mandira		2	27.00	0.10		5.40		
	Arkeshwara Temple Platform		2	10.00	0.10		2.00		
	Hanumegowda House Rd		2	175.00	0.10		35.00		
							56.40	**441.87**	**24,921.47**
								Total Construction Cost	**8396417.45**
								Towards GST 12%	**1007570.09**
								Tender premiun 5%	**419820.87**
								DPR and PMC Charges 2%	**176000.00**
								Sub Total	**9999808.42**
								Utility Shifting,Miscellaneous and Rounding off	**191.58**
								GRAND TOTAL	**10000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains at Kempanahalli village.

Est Cost: 100.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Kempanahalli								
	Narayanappa house Rd		1	86.00	1.00	1.00	86.00		
	Mn Rd		1	70.00	1.00	1.00	70.00		
	Shivashankar house Rd		1	90.00	1.00	1.00	90.00		
	Government School Rd		1	102.00	1.10	1.00	112.20		
	Temple Katte to Lake		1	250.00	1.60	1.90	760.00		
	Katte RCC Wall		1	10.00	0.60	1.00	6.00		
			1	18.00	0.60	1.00	10.80		
	Rain Water Harvesting pits		5	0.31		1.80	2.79		
	Culvert		4	6.50	1.40	0.90	32.76		
							1170.55	**216.50**	**253424.08**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	2651.00							
	c) Coarse sand.	Cum	5	0.31		0.30	**0.47**	**2651**	**1,232.72**
	Data rate	2651.00							
	d) Fine Sand	Cum	5	0.31		0.20	**0.31**	**2651**	**821.81**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	5	0.31		0.30	**0.47**	**1901**	**883.97**
3	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0,**								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Deduct 12% GST	1298.68							
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		5	1.80			9.00		
							9.00	10822.32	97,400.88
4	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	5	0.31			1.55	71.03	110.10
5	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
	CC Drain	**Cum**							
	Kempanahalli								
	Narayanappa house Rd		1	86.00	1.00	0.15	12.90		
	Mn Rd		1	70.00	1.00	0.15	10.50		
	Shivashankar house Rd		1	90.00	1.00	0.15	13.50		
	Government School Rd		1	102.00	1.10	0.15	16.83		
	Temple Katte to Lake		1	250.00	1.60	0.15	60.00		
	Katte RCC Wall		1	10.00	0.60	0.15	0.90		
			1	18.00	0.60	0.15	1.62		
	Temple Katte		1	10.00	9.00	0.15	13.50		
	Culvert		4	6.50	1.40	0.15	5.46		
							135.21	5349.82	723349.16
6	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							
	Area Weightage 3%	200.10							
	Total	**6870.10**							
	CC Drain Raft	**Cum**							
	Kempanahalli								
	Narayanappa house Rd		1	86.00	0.75	0.15	9.68		
	Mn Rd		1	70.00	0.75	0.15	7.88		
	Shivashankar house Rd		1	90.00	0.75	0.15	10.13		
	Government School Rd		1	102.00	0.90	0.15	13.77		
	Temple Katte to Lake		1	250.00	1.60	0.20	80.00		
	CC Drain Wall								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Government School Rd		2	102.00	0.15	0.60	18.36		
	Temple Katte to Lake		2	250.00	0.20	1.60	160.00		
	Temple Katte to Lake Slab		1	250.00	1.60	0.20	80.00		
							424.09		
	Culvert Raft		4	6.50	1.20	0.20	6.24		
	Culvert Wall		8	6.50	0.23	0.60	7.18		
							13.42		
	Katte RCC Wall		1	10.00	0.30	1.00	3.00		
			1	18.00	0.30	1.00	5.40		
							445.90	**6870.10**	**3063384.46**
7	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	**Tn**	1	424.09	60.00		25445.10		
	Consider 90kg/Cum for Drain	**Tn**	1	13.42	90.00		1207.44		
							26652.54		
							26.65	**70279.99**	**1873140.24**
8	Providing and laying **100mm thick pre-cast cover slabs** over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM of machineries, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500, 1700. (P.No-272 ,I No-37.66 of PWD BCSR 2018-19),								
	Basic rate	1081.00							
	Area Weightage 3%	32.43							
	Total	**1113.43**							
	CC Drain Top Covering Slab	m							
	Kempanahalli								
	Narayanappa house Rd		1	86.00			86.00		
	Mn Rd		1	70.00			70.00		
	Shivashankar house Rd		1	90.00			90.00		
							246.00	**1113.43**	**273903.78**
9	Providing and laying flooring using **prepolished, gang saw/water cut 19mm thick granite** laid with a bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials, mortar and labours etc., complete as per specifications. -do- using black granite/ Multy Red / Ruby Red / Black / Hassan Green / River Pink Granite of width not less than 900mm (P.No-110 ,I No-14.47.2 of PWD BCSR 2018-19),								
	Basic rate	2240.00							
	Area Weightage 3%	67.20							
	Total	**2307.20**							
		Sqm							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
10	Providing and fixing of **wall cladding using 20mm thick gang saw water cut** Shiva gold granite, grey granite in CM 1:3 proportion cut to required shape, pattern with paper joints, finished with cement mortal using white cement and colour pigments to match the colour of slab making through jointing with sealant, making holes 25mmx12mm grooves in joints including cost of all materials, mortar, labour, curing etc., complete as per specification. (P.No-110 ,I No-14.47.2 of PWD BCSR 2018-19).						90.00	2307.20	207648.00
	Basic rate	3542.00							
	Area Weightage 3%	106.26							
	Total	**3648.26**							
		Sqm							
	Kempanahalli								
	Temple Katte								
			1	19.00		0.60	11.40		
							11.40	**3648.26**	**41,590.16**
11	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting , including form work, cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	CC Drain Top Covering Slab	**Sqm**							
	Kempanahalli								
	Government School Rd								
			1	102.00	0.90		91.80		
							91.80	**2337.00**	**214536.60**
12	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	**5418.00**							
	Culverts	**Sqm**	4	6.50	1.20		31.20		
							31.20	**5418.00**	**169041.60**
13	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
		Cum							
	Kempanahalli								
	Narayanappa house Rd		1	37.00	3.80	0.30	42.18		
	Shivashankar house Rd		1	90.00	5.00	0.30	135.00		
	Mallikarjuna house Rd		1	30.00	5.00	0.30	45.00		
							222.18	**67.83**	**15,070.47**
	KSRRB M3								

...t by mechanical means using pneumatic
...locations

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Loading and Unloding & Lead	25.60							
	Total	951.57							
		Cum							
	Kempanahalli								
	Mn Rd		1	70.00	4.50	0.20	63.00		
							63.00	951.57	59,948.91
15	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147)								
	Basic rate	6.00							
	Area Weightage 3%	0.18							
	Total	6.18							
		Sqm							
	Kempanahalli								
	Narayanappa house Rd		1	37.00	3.80		140.60		
	Mn Rd		1	70.00	4.50		315.00		
	Shivashankar house Rd		1	90.00	5.00		450.00		
	Mallikarjuna house Rd		1	30.00	5.00		150.00		
							1055.60	6.18	6,523.61
16	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	3692.55							
		Cum							
	Kempanahalli								
	Narayanappa house Rd		1	37.00	3.80	0.15	21.09		
	Mn Rd		1	70.00	4.50	0.15	47.25		
	Shivashankar house Rd		1	90.00	5.00	0.15	67.50		
	Mallikarjuna house Rd		1	30.00	5.00	0.15	22.50		
							158.34	3692.55	584678.37
17	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	5063.48							
		Cum							
	Kempanahalli								
	Narayanappa house Rd		1	37.00	3.80	0.15	21.09		
	Mn Rd		1	70.00	4.50	0.15	47.25		
	Shivashankar house Rd		1	90.00	5.00	0.15	67.50		
	Mallikarjuna house Rd		1	30.00	5.00	0.15	22.50		
							158.34	5063.48	801751.42
18	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 3%	12.87							
	Total	441.87							
		Sqm							
	Kempanahalli								
	Narayanappa house Rd		2	37.00	0.10		7.40		
	Mn Rd		2	70.00	0.10		14.00		
	Shivashankar house Rd		2	90.00	0.10		18.00		
	Mallikarjuna house Rd		2	30.00	0.10		6.00		
							45.40	441.87	20,060.90
								Total Construction Cost	8410858.48
								Towards GST 12%	1009303.02
								Tender premiun 5%	420542.92
								DPR and PMC Charges 2%	159000.00
								Sub Total	9999704.42
								Utility Shifting,Miscellaneous and Rounding off	295.58
								GRAND TOTAL	10000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains and construction of Concrete roads at Mylapanahalli village Limits.

Est Cost: 100.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Mylapanahalli								
	Gangadhar house Rd		1	160.00	1.10	0.90	158.40		
	Vijayamma house Rd		1	75.00	1.10	0.90	74.25		
	Ramchandrappa house Rd		2	142.00	1.10	0.90	281.16		
	Dasegowda house Rd		1	88.00	1.10	0.90	87.12		
	Sanjeevappa house Rd		1	40.00	1.10	0.90	39.60		
	Munaswamy house Rd		1	72.00	1.10	0.90	71.28		
	Cross Road		1	60.00	1.10	0.90	59.40		
	Rain Water Harvesting pits		7	0.31		1.80	3.91		
	Culvert		3	5.00	1.40	0.90	18.90		
							794.02	**216.50**	**171904.46**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	7	0.31		0.40	**0.87**	**1901**	**1,650.07**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	7	0.31		0.40	**0.87**	**1901**	**1,650.07**
	Data rate	2651.00							
	c) Coarse sand.	Cum	7	0.31		0.30	**0.65**	**2651**	**1,725.80**
	Data rate	2651.00							
	d) Fine Sand	Cum	7	0.31		0.20	**0.43**	**2651**	**1,150.53**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	7	0.31		0.30	**0.65**	**1901**	**1,237.55**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
3	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0, 630 mm dia.** (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	Basic rate	12121.00							
	Deduct 12% GST	1298.68							
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		7	1.80			12.60		
							12.60	**10822.32**	**136361.23**
4	**Providing of Geonets** for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	7	0.31			**2.17**	**71.03**	**154.14**
5	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
	CC Drain	**Cum**							
	Mylapanahalli								
	Gangadhar house Rd		1	160.00	1.10	0.15	26.40		
	Vijayamma house Rd		1	75.00	1.10	0.15	12.38		
	Ramchandrappa house Rd		2	142.00	1.10	0.15	46.86		
	Dasegowda house Rd		1	88.00	1.10	0.15	14.52		
	Sanjeevappa house Rd		1	40.00	1.10	0.15	6.60		
	Munaswamy house Rd		1	72.00	1.10	0.15	11.88		
	Cross Road		1	60.00	1.10	0.15	9.90		
	Culvert		3	5.00	1.40	0.15	3.15		
							131.69	**5349.82**	**704491.05**
6	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	CC Drain Raft	Cum							
	Mylapanahalli								
	Gangadhar house Rd		1	160.00	0.90	0.15	21.60		
	Vijayamma house Rd		1	75.00	0.90	0.15	10.13		
	Ramchandrappa house Rd		2	142.00	0.90	0.15	38.34		
	Dasegowda house Rd		1	88.00	0.90	0.15	11.88		
	Sanjeevappa house Rd		1	40.00	0.90	0.15	5.40		
	Munaswamy house Rd		1	72.00	0.90	0.15	9.72		
	Cross Road		1	60.00	0.90	0.15	8.10		
	CC Drain Wall								
	Mylapanahalli								
	Gangadhar house Rd		2	160.00	0.15	0.60	28.80		
	Vijayamma house Rd		2	75.00	0.15	0.60	13.50		
	Ramchandrappa house Rd		4	142.00	0.15	0.60	51.12		
	Dasegowda house Rd		2	88.00	0.15	0.60	15.84		
	Sanjeevappa house Rd		2	40.00	0.15	0.60	7.20		
	Munaswamy house Rd		2	72.00	0.15	0.60	12.96		
	Cross Road		2	60.00	0.15	0.60	10.80		
							245.39		
	Culvert Raft		3	5.00	1.20	0.20	3.60		
	Culvert Wall		6	5.00	0.23	0.60	4.14		
							7.74		
							253.13	**6870.10**	**1738994.06**
7	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	Tn	1	245.39	60.00		14723.10		
	Consider 90kg/Cum for Drain	Tn	1	7.74	90.00		696.60		
							15419.70		
							15.42	**70279.99**	**1083696.36**
8	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting , including form work, cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	CC Drain Top Covering Slab	Sqm							
	Mylapanahalli								
	Gangadhar house Rd		1	160.00	0.90		144.00		
	Vijayamma house Rd		1	75.00	0.90		67.50		
	Ramchandrappa house Rd		2	142.00	0.90		255.60		
	Dasegowda house Rd		1	88.00	0.90		79.20		
	Sanjeevappa house Rd		1	40.00	0.90		36.00		
	Munaswamy house Rd		1	72.00	0.90		64.80		
			1	60.00	0.90		54.00		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
9	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	5418.00							
	Culverts	Sqm	3	5.00	1.20		18.00		
							18.00	**5418.00**	**97,524.00**
10	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
		Cum							
	Mylapanahalli								
	Vijayamma house Rd		1	75.00	3.80	0.30	85.50		
	Vijay Kumar house Rd		1	90.00	5.00	0.30	135.00		
	Ariyamma house Rd, Anganwadi		1	125.00	4.50	0.30	168.75		
	Rathnamma house Rd		1	30.00	2.50	0.30	22.50		
	Ramchandrappa house Rd		1	142.00	5.00	0.30	213.00		
							624.75	**67.83**	**42,376.79**
11	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147)								
	Basic rate	6.00							
	Area Weightage 3%	0.18							
	Total	**6.18**							
		Sqm							
	Mylapanahalli								
	Vijayamma house Rd		1	75.00	3.80		285.00		
	Vijay Kumar house Rd		1	90.00	5.00		450.00		
	Ariyamma house Rd, Anganwadi		1	125.00	4.50		562.50		
	Rathnamma house Rd		1	30.00	2.50		75.00		
	Ramchandrappa house Rd		1	142.00	5.00		710.00		
							2082.50	**6.18**	**12,869.85**
12	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Area Weightage 3%	107.55							
	Total	3692.55							
		Cum							
	Mylapanahalli								
	Vijayamma house Rd		1	75.00	3.80	0.15	42.75		
	Vijay Kumar house Rd		1	90.00	5.00	0.15	67.50		
	Ariyamma house Rd, Anganwadi		1	125.00	4.50	0.15	84.38		
	Rathnamma house Rd		1	30.00	2.50	0.15	11.25		
	Ramchandrappa house Rd		1	142.00	5.00	0.15	106.50		
							312.38	**3692.55**	**1153460.31**
13	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 Its conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	5063.48							
		Cum							
	Mylapanahalli								
	Vijayamma house Rd		1	75.00	3.80	0.15	42.75		
	Vijay Kumar house Rd		1	90.00	5.00	0.15	67.50		
	Ariyamma house Rd, Anganwadi		1	125.00	4.50	0.15	84.38		
	Rathnamma house Rd		1	30.00	2.50	0.15	11.25		
	Ramchandrappa house Rd		1	142.00	5.00	0.15	106.50		
							312.38	**5063.48**	**1581704.57**
14	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 3%	12.87							
	Total	441.87							
		Sqm							
	Mylapanahalli								
	Vijayamma house Rd		2	75.00	0.10		15.00		
	Vijay Kumar house Rd		2	90.00	0.10		18.00		
	Ariyamma house Rd, Anganwadi		2	120.00	0.10		24.00		
	Ramchandrappa house Rd		2	142.00	0.10		28.40		
							85.40	**441.87**	**37,735.70**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
								Towards GST 12%	1008858.87
								Tender premiun 5%	420357.86
								DPR and PMC Charges 2%	163000.00
								Sub Total	9999373.97
								Utility Shifting,Miscellaneous and Rounding off	626.03
								GRAND TOTAL	10000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains and construction of Concrete roads at Synganayakanahalli village Limits.

Est Cost: 100.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Synganayakanahalli								
	Acharappa house Rd		1	86.00	1.10	0.90	85.14		
	Krishnappa house Rd		2	30.00	1.10	0.90	59.40		
	Yeduyurappa Nagar cross Rd-1		2	175.00	1.10	0.90	346.50		
	Yeduyurappa Nagar cross Rd-2		1	125.00	1.10	0.90	123.75		
	Rain Water Harvesting pits		5	0.31		1.80	2.79		
	Culvert		6	8.00	1.40	0.90	60.48		
							678.06	**216.50**	**146799.99**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	2651.00							
	c) Coarse sand.	Cum	5	0.31		0.30	**0.47**	**2651**	**1,232.72**
	Data rate	2651.00							
	d) Fine Sand	Cum	5	0.31		0.20	**0.31**	**2651**	**821.81**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	5	0.31		0.30	**0.47**	**1901**	**883.97**
3	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0, 630 mm dia.** (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	Basic rate	12121.00							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		5	1.80			9.00		
							9.00	10822.32	97,400.88
4	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	5	0.31			1.55	71.03	110.10
5	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
	CC Drain	**Cum**							
	Synganayakanahalli								
	Acharappa house Rd		1	86.00	1.10	0.15	14.19		
	Krishnappa house Rd		2	30.00	1.10	0.15	9.90		
	Yeduyurappa Nagar cross Rd-1		2	175.00	1.10	0.15	57.75		
	Yeduyurappa Nagar cross Rd-2		1	125.00	1.10	0.15	20.63		
	Culvert		6	8.00	1.40	0.15	10.08		
							112.55	**5349.82**	**602095.49**
6	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							
	Area Weightage 3%	200.10							
	Total	**6870.10**							
	CC Drain Raft	**Cum**							
	Synganayakanahalli								
	Acharappa house Rd		1	86.00	0.90	0.15	11.61		
	Krishnappa house Rd		2	30.00	0.90	0.15	8.10		
	Yeduyurappa Nagar cross Rd-1		2	175.00	0.90	0.15	47.25		
	Yeduyurappa Nagar cross Rd-2		1	125.00	0.90	0.15	16.88		
	CC Drain Wall								
	Synganayakanahalli								
	Acharappa house Rd		2	86.00	0.15	0.60	15.48		
	Krishnappa house Rd		4	30.00	0.15	0.60	10.80		
	Yeduyurappa Nagar cross Rd-1		4	175.00	0.15	0.60	63.00		
	Yeduyurappa Nagar cross Rd-2		2	125.00	0.15	0.60	22.50		
							195.62		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							24.77		
							220.38	6870.10	1514053.25
7	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	**Tn**	1	195.62	60.00		11736.90		
	Consider 90kg/Cum for Drain	**Tn**	1	24.77	90.00		2229.12		
							13966.02		
							13.97	**70279.99**	**981531.75**
8	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting , including form work, cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	CC Drain Top Covering Slab	**Sqm**							
	Synganayakanahalli								
	Acharappa house Rd		1	86.00	0.90		77.40		
	Krishnappa house Rd		2	30.00	0.90		54.00		
	Yeduyurappa Nagar cross Rd-1		2	175.00	0.90		315.00		
	Yeduyurappa Nagar cross Rd-2		1	125.00	0.90		112.50		
							558.90	**2337.00**	**1306149.30**
9	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	**5418.00**							
	Culverts	**Sqm**	6	8.00	1.20		57.60		
							57.60	**5418.00**	**312076.80**
10	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
		Cum							
	Synganayakanahalli								
	Laxmi venkateshwara Provision store rd		1	300.00	4.50	0.30	405.00		
	Raju house Rd		1	57.00	4.00	0.30	68.40		
	Muneshwara temple Rd		1	120.00	6.00	0.40	288.00		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
11	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147)								
	Basic rate	6.00							
	Area Weightage 3%	0.18							
	Total	**6.18**							
		Sqm							
	Synganayakanahalli								
	Laxmi venkateshwara Provision store rd		1	300.00	4.50		1350.00		
	Raju house Rd		1	57.00	4.00		228.00		
	Muneshwara temple Rd		1	120.00	6.00		720.00		
							2298.00	**6.18**	**14,201.64**
12	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	**3692.55**							
		Cum							
	Synganayakanahalli								
	Laxmi venkateshwara Provision store rd		1	300.00	4.50	0.15	202.50		
	Raju house Rd		1	57.00	4.00	0.15	34.20		
	Muneshwara temple Rd		1	120.00	6.00	0.20	144.00		
							380.70	**3692.55**	**1405753.79**
13	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	5063.48							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Synganayakanahalli								
	Laxmi venkateshwara Provision store rd		1	300.00	4.50	0.15	202.50		
	Raju house Rd		1	57.00	4.00	0.15	34.20		
	Muneshwara temple Rd		1	120.00	6.00	0.20	144.00		
							380.70	**5063.48**	**1927666.84**
14	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 3%	12.87							
	Total	**441.87**							
		Sqm							
	Synganayakanahalli								
	Laxmi venkateshwara Provision store rd		2	300.00	0.10		60.00		
	Raju house Rd		2	57.00	0.10		11.40		
	Muneshwara temple Rd		2	120.00	0.10		24.00		
							95.40	**441.87**	**42,154.40**
								Total Construction Cost	**8406935.73**
								Towards GST 12%	**1008832.29**
								Tender premiun 5%	**420346.79**
								DPR and PMC Charges 2%	**163000.00**
								Sub Total	**9999114.80**
								Utility Shifting,Miscellaneous and Rounding off	**885.20**
								GRAND TOTAL	**10000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of Work: Development of works at Singanayakanahalli Gundu Thopu

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
1	**Geophysical investigation** of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P.47, I. 9.4) PRED.SR 2019-20**								
	Basic Rate	3768.0							
			1				**1.00**	3768.00	**3768.00**
2	**Sinking borewell of 165 mm dia** clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, collars, cap etc.,) **Page no. 46 / I. 9.1 PRED SR 2019-20**								
	Basic Rate	347.00							
	0 to 50 m		1	50.00			**50.00**	347.00	**17350.00**
	Basic Rate	442.00							
	50 to 100 m		1	50.00			**50.00**	442.00	**22100.00**
	Basic Rate	456.00							
	100 to 150 m		1	50.00			**50.00**	456.00	**22800.00**
	Basic Rate	536.00							
	150 to 200 m		1	50.00			**50.00**	536.00	**26800.00**
	Basic Rate	634.00							
	200 to 250 m		1	50.00			**50.00**	634.00	**31700.00**
	Basic Rate	700.00							
	250 to 300 m		1	50.00			**50.00**	700.00	**35000.00**
3	Supply of ISI mark 175 mm nominal bore medium black ERW **casing pipe** of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) **SE PRED III NO 84**								
		Rmtr	1	50.00			**50.00**	1325.00	**66250.00**
4	Providing and fixing in trenches **galvanised / mild steel tubes** (medium grade) 50mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.6 (P. No.92/ I. No. 13.15 KPWD SR 2018-19)								
	Basic rate	388.00							
	Area Weightage 3%	11.64							
	Total	**399.64**							
		mtr	1	280.00			**280.00**	399.64	**111899.20**
5	Providing 250mm dia PVC Pipe **BWSSB SR 17-18 PNO 133 SL NO 1.11**								
		Rmtr							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
7	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990. **P. No. 7/ I No. (2.6.4) 3cx 6.0 Sqm KPWD Electrical SR 2019-20**								
		Mtr	1	570.00			570.00	205.00	116850.00
8	Atalanta,Suguna,CRI KIRLOSKER AND other equipment **pumps 15.00 HP/11KW(30 Stage)**P. No. XLII I No.43) (K.P.W.D SR 2018-19)								
		Nos	1				1.00	63498.00	63498.00
9	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia **(P No.40, I No. 6.1) KPWD Electrical SR 2019-20**								
		NO	1				1.00	2999.70	2999.70
10	Supplying and Fixing 20"x20"x2.5"polished **wood board** made up not less than 15mm thick plank with front plank one end providing for olding at other end fixing the same to the valve using tapered bolts and nuts, (P No. 24 No.5.6.6 KPWD Electrical SR 2019-20)								
		Each	1				1.00	292.00	292.00
11	Supplying of **1.1 KV LT UG cable** having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp (2CX 10Sqm.mm wire armoured) confirming IS 3975;1990(no.of strip indicated i GTP) AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group.A.4 Core 16Sqmm.P No.40/ I No.6.4.4 (4 core 16 Sqmm) KPWD Electrical SR 2019-20								
		Mtr	1	30.00			30.00	150.00	4500.00
12	**Labour charges for laying of 1.1 K.V class UG cable**, in existing trench GI Pipe / stoneware pipe /on wall/on poles as required In existing trencg/duct 6 Sqmm to 16 Sqmm)P No. 41 / I No. 6.5.1 KPWD Electrical SR 2019-20								
		Mtr	1	25.00			25.00	11.88	297.00
13	Supplying and fixing of **procelin fuse channel** with e on existing wooden / panel using necessary nuts, bolts and washers , 63 Amps **(P No. 44 / I No. 5.7.3 KPWD Electrical SR 2019-20)**								
		Each	1				1.00	227.00	227.00
14	Providing and fixing in position **50mm nominal bore non-return valve** horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications **(Page No.95 Item No. 13.62 / PWD SR 2018-19)**								
	Basic rate	1269.00							
	Area Weightage 3%	38.07							
	Total	**1307.07**							
		Nos	1				1.00	1307.07	1307.07
15	Supplying and fixing maniature circuit breakers on existing **MCB Distribution boards** using necessary fixing materials and 'C' Type curve, indicator ON/OFF, Energy cross -3 with short circuit breaking capacity of 10K And Completed wiring confirming to IEC 60898 50-63 Amps TPN **(P. No. 27 I No.5.17.9) KPWD Electrical SR 2019-20**								
		Each	1				1.00	2397.00	2397.00

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
16	KSRB 2-2 : **Earthwork excavation by manual means** for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. **(P. No.6/ I No 2.3 PWD SR 2018-19)**								
	Basic rate	299.00							
	Area Weightage 3%	8.97							
	Total	**307.97**							
		Cum	1	150.00	0.60	0.70	**63.00**	**307.97**	**19402.11**
17	Supplying PVC ring tight pipes conformin to IS 4980 :2000 With latest amendments and conveying to work site rolling and lowering into trenches laying true line level and prefect linking at joints testing and commissoning incuding loading and un loading at both destinations and cuts of pipes wherever neccessary including joints of PVC pipes and specificals (excluding cost of pipes)with jointing of approvel type with all labour with all lead and lift incuding encasing the pipe alround to adepth of not less then 15cms with soft gravel or selected earth availble from the excavation etc.., completed and giving necessary hydralic test to the required pressure as per IS (Contractor will make his own arrangement for procuring water for testing)(P. No.133 I No 1.4 BWSSB SR 2018-19) **63mm outer dia, 6kg/sqcm & class 5**								
		Mtr	1	150.00			**150.00**	**122.00**	**18300.00**
18	**Refilling available earth** around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. includingcost of all labour complete as per specifications. P. No. 7.1/ I No. (2.11) KPWD SR 2018-19								
	Basic rate	121.00							
	Area Weightage 3%	3.63							
	Total	**124.63**							
		Cum	1	150.00	0.60	0.70	**63.00**	**124.63**	**7851.69**
19	Supplying fully automatic **star-delta starter** unit push button type with suitable wires, 3 contactors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts 3 phase and wired after fixing to the existing wooden board for motor.Above 12.5 HP upto 25 HP (P No. 24 / I No.5.2.2 KPWD Electrical SR 2019-20)								
		Nos	1				**1.00**	**8000.00**	**8000.00**
20	KSRRB M200-11.1. **Clearing and grubbing road land** including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removalof stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned,including removal and disposal of top organic soil not exceeding 150 mm in thickness complete as per specifications. S.R Page no 5, item no 18.16 By Mechanical Means:B. **In area of thorny jungle**								
		Ha	1	100.00	68.00		6800.00		
							6800.00		
							0.68	**23594.21**	**16044.06**
	Basic Rate:	22907.00							
	Area Weightage @ 3%	687.21							
	Total	23594.21							
21	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after								

No	Length	Width	Depth	Qty	Rate	Amount
1	100.00	0.60	0.60	36.00		
				42.27	**216.50**	**9150.81**

all types of soil by mechanical means including cutting and
slopes, in accordance with requirements of lines, grades
lead of 1.00 km and complete as per specifications MORTH
oading and unloading with 10km lead= (I No-19.14,P No-

m	1	100.00	68.00	0.45	3060.00		
					3060.00	**67.83**	**207559.80**
1.00							
1.23							
5.60							
67.83							

dation with granite / trap broken metal 100mm. and down size,
packing, ramming, watering, including cost of all materials and
as per specifications. specification. No. KBS

Cum	8	2.10	1.2	0.20	4.03		
					4.03	**2501.87**	**10087.54**
2429.00							
72.87							
2501.87							

lain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with
anite metal coarse aggregate @ 0.892cum and fine aggregates @
inemixed, concrete laid in layers not exceeding 15 cms, thick well
th, cost of all materials, labour HOM of machinery, curing complete as

Cum	8	2.10	1.20	0.15	3.02		
	1	100.00	0.60	0.15	9.00		
	1	20.89		0.20	4.18		
	10	2.00	1.50	0.15	4.50		
					20.70	**5349.82**	**110751.97**
5194.00							
155.82							
5349.82							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
25	KSRB 5.2-3 : Providing and **constructing granite / trap / basalt size stone masonry** in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13								
	SR Page 25 iteam 5.6								
	Gazebow	Cum	8	2.10	0.90	0.60	9.07		
	For Fencing		1	96.00	0.60	0.40	23.04		
	2nd Step								
	Gazebow		8	2.10	0.45	0.45	3.40		
	For Fencing		1	96.00	0.45	0.40	17.28		
							52.79	**4733.88**	**249920.46**
	Basic Rate:	4596.00							
	Area Weightage @ 3%	137.88							
	Total	4733.88							
26	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	For Fencing Coping	Cum	1	96.00	0.45	0.10	4.32		
	For Kerb								
	Pathway		2	308.00	0.20	0.10	12.32		
	For Bench platform		10	5.00	0.20	0.10	1.00		
							17.64	**5584.66**	**98513.40**
	Basic Rate:	5422.00							
	Area Weightage @ 3%	162.66							
	Total	5584.66							
27	Providing and constructing load bearing wall with **concrete solid blocks** having block ebsity not less than 1800 kg/m3 Having aq minimum average compressive strength of 5.00 N.mm2 confirming to IA 2185 (Part q) 2005 and constructed with CM 1:4 as [er IS 2572:2005 including cost of all materials labour charges, scaffolding. curing hire charges of machineries etc as per specifications. **Solid concrete blocks of Size 400x200x200 mm**								
	S.R Page no 27, item no 5.27.1	Sqmt							
	Gazebow		8	2.10		0.60	10.08		
							10.08	**939.36**	**9468.75**
	Basic Rate:	912.00							
	Area Weightage @ 3%	27.36							
	Total	939.36							
28	Providing and laying flooring using prepolished, **water cut/gang saw 19mm thick** granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 900mm(Item No 14.47.2 of KPWD 2018-19 Pg no.								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
	Gazebow Wall		16	2.1		0.75	25.20		
							46.09	2307.20	106338.85
	Basic Rate:	2240.00							
	Area Weightage @ 3%	67.20							
	Total	2307.20							
29	Code No. 2067 MS pipes of 80mm to 100mm								
	S.R.page XII item 298								
		Kgs					500.00	38.41	19204.35
	Basic Rate:	37.29							
	Area Weightage @ 3%	1.12							
	Total	38.41							
30	Code No. 0154 G.I. Pipe 50mm dia B Class								
	S.R.page XIX item 499								
		mtr	4.00	5.00			20.00		
			8.00	3.50			28.00		
							48.00	288.05	13826.39
	Basic Rate:	279.66							
	Area Weightage @ 3%	8.39							
	Total	288.05							
31	Code No. 0770 M S Flats								
	S.R.page IX item 233	Tn					0.50		
							0.50	34915.26	17457.63
	Basic Rate:	33898.31							
	Area Weightage @ 3%	1016.95							
	Total	34915.26							
32	Code No. 2091 M.S Tube								
	S.R.page XII item 301	mtr	18	8		2	288.00	226.95	65361.66
	Basic Rate:	220.34							
	Area Weightage @ 3%	6.61							
	Total	226.95							
33	Supplying and fixing **new Mangalore tiles** on existing reepers. (P.No.267, I.No.37.9 of PWD SR 2018-19)								
		Sqm	8.00	4.20			33.600	419.21	14085.46
	Basic Rate:	407.00							
	Area Weightage @ 3%	12.21							
	Total	419.21							
34	Providing **Mangalore Ridge tiles** set in C.M. 1:2 and pointed with C.M. 1:2. (P.No.255, I.No.37.7 of PWD SR 2018-19)								
		Sqm	8.00	4.20			33.600	210.12	7060.03
	Basic Rate:	204.00							
	Area Weightage @ 3%	6.12							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
35	**Construction of Embankment** with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) . (P.No.148, I.No.19.60 of PWD SR 2018-19)								
	Gazebo	Cum	1	20.89		0.40	8.36		
	Full area levelling	Cum	1	100.00	68.00	0.30	2040.00		
							2048.36	**334.75**	**685687.17**
	Basic Rate:	325.00							
	Area Weightage @ 3%	9.75							
	Total	334.75							
36	Supplying and fixing **M.S. Rectangular poles** made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1 :2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 ems. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineer-in - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) (P.No-266,I No-37.2)								
	Front Fencing	mtr	48	2.50			120.00		
							120.00	**884.77**	**106172.40**
	Basic Rate:	859.00							
	Area Weightage @ 3%	25.77							
	Total	884.77							
37	Providing **chain link fencing 50mm size** of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint (P.No-266,I No-37.3)								
	Front Fencing	Sqm	1	96.00		1.80	172.80		
							172.80	**736.45**	**127258.56**
	Basic Rate:	715.00							
	Area Weightage @ 3%	21.45							
	Total	736.45							
38	Providing and fixing **M.S. Block pipe of 38mm dia,** of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint(P.No-266,I No-37.4)								
	Front Fencing	mtr	3	96.00			288.00		
							288.00	**420.24**	**121029.12**
	Basic Rate:	408.00							
	Area Weightage @ 3%	12.24							
	Total	420.24							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
39	Providing and fixing **M.S. Gate** as per Chief Architect Drawing, using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification. (P.No-266,I No-7.37)								
	Gate	Sqm	1	4.00		2.00	8.00		
							8.00	**3102.36**	**24818.88**
	Basic Rate:	3012.00							
	Area Weightage @ 3%	90.36							
	Total	3102.36							
40	KSRB 14.6 : Providing and laying **heavy duty cobble stones interlock pavers**, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications. Specification No. KBS (P.No-103,I No-14.6), 60mm thick								
	Pathway	Sqm	1	308.00		2.00	616.00		
							616.00	**1084.59**	**668107.44**
	Basic Rate:	1053.00							
	Area Weightage @ 3%	31.59							
	Total	1084.59							
41	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30)								
	Pathway	Nos	2	308.00			616.00		
	For Bench platform		10	5.00			50.00		
							666.00		
							1480.00	**420.24**	**621955.20**
	Basic Rate:	408.00							
	Area Weightage @ 3%	12.24							
	Total	420.24							
42	**Painting two coats after filling the surface with synthetic enamel paint** in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
	Pathway	Nos	2	308.00		0.40	246.40		
	For Bench platform		10	5.00		0.40	20.00		
							266.40	**82.40**	**21951.36**
		80.00							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Qty	Rate	Amount
	Total	82.40							
43	Providing and laying/fixing cement base, precast, **pre polished cement concrete, designer tiles 25mm thick** for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, mortar, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No-112,I No-14.62)								
		Sqm							
	For Bench platform		10	2.00	1.50		30.00		
							30.00	**1268.96**	**38068.80**
	Basic Rate:	1232.00							
	Area Weightage @ 3%	36.96							
	Total	1268.96							
44	**Executive Bench-** Made out of Sadarahalli grey stone with hand supports with 3 line finishing with arch design with 100mm slabs. Height 90x Length 1500 width 45 cms (Data approved rate)								
		Each	12				12.00		
							12.00	**18200.00**	**218400.00**
	Data Rate	16250.00							
	Deduct 12% GST	1950.00							
	Total	18200.00							
45	BESCOM Deposite Charges	Nos	1				**1.00**	**14000.00**	**14000.00**
								Total Construction Cost	**4202204.86**
								Towards GST 12%	**504264.58**
								Tender premiun 5%	**210110.24**
								DPR and PMC Charges 2%	**83,000.00**
								Sub Total	**4999579.68**
								Utility Shifting,Miscellaneous and Rounding off	**420.32**
								GRAND TOTAL	**5000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019, PRED, BWSSB, KPWD Electrical SR for year 2018-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer,

Executive Engineer,
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains at Honnenahalli village Limits .

Est Cost: 100.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Honnenahalli								
	Mn Rd		2	140.00	1.10	1.00	308.00		
	Behind Temple		1	75.00	1.10	1.00	82.50		
	Forest Rd Right side		1	90.00	1.10	1.00	99.00		
	Honnenahalli Mn Rd left side		1	250.00	1.10	1.00	275.00		
	Rain Water Harvesting pits		5	0.31		1.80	2.79		
	Culvert		5	10.00	1.80	0.90	81.00		
							848.29	**216.50**	**183654.79**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	2651.00							
	c) Coarse sand.	Cum	5	0.31		0.30	**0.47**	**2651**	**1,232.72**
	Data rate	2651.00							
	d) Fine Sand	Cum	5	0.31		0.20	**0.31**	**2651**	**821.81**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	5	0.31		0.30	**0.47**	**1901**	**883.97**
3	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0, 630 mm dia.** (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	Basic rate	12121.00							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		5	1.80			9.00		
							9.00	10822.32	97,400.88
4	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	5	0.31			1.55	71.03	110.10
5	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
	CC Drain	**Cum**							
	Honnenahalli								
	Mn Rd		2	140.00	1.10	0.15	46.20		
	Behind Temple		1	75.00	1.10	0.15	12.38		
	Forest Rd Right side		1	90.00	1.10	0.15	14.85		
	Honnenahalli Mn Rd left side		1	250.00	1.10	0.15	41.25		
	Culvert		5	10.00	1.80	0.15	13.50		
							128.18	**5349.82**	**685713.18**
6	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							
	Area Weightage 3%	200.10							
	Total	**6870.10**							
	CC Drain Raft	**Cum**							
	Honnenahalli								
	Mn Rd		2	140.00	0.90	0.15	37.80		
	Behind Temple		1	75.00	0.90	0.15	10.13		
	Forest Rd Right side		1	90.00	0.90	0.15	12.15		
	Honnenahalli Mn Rd left side		1	250.00	0.90	0.15	33.75		
	CC Drain Wall								
	Honnenahalli								
	Mn Rd		4	140.00	0.15	0.60	50.40		
	Behind Temple		2	75.00	0.15	0.60	13.50		
	Forest Rd Right side		2	90.00	0.15	0.60	16.20		
	Honnenahalli Mn Rd left side		2	250.00	0.15	0.60	45.00		
							218.93		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							28.80		
							247.73	6870.10	1701895.52
7	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	**Tn**	1	218.93	60.00		13135.50		
	Consider 90kg/Cum for Drain	**Tn**	1	28.80	90.00		2592.00		
							15727.50		
							15.73	**70279.99**	**1105328.54**
8	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting , including form work, cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	CC Drain Top Covering Slab	**Sqm**							
	Honnenahalli								
	Mn Rd		2	140.00	0.90		252.00		
	Behind Temple		1	75.00	0.90		67.50		
	Forest Rd Right side		1	90.00	0.90		81.00		
	Honnenahalli Mn Rd left side		1	250.00	0.90		225.00		
							625.50	**2337.00**	**1461793.50**
9	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	**5418.00**							
	Culverts	**Sqm**	5	10.00	1.50		75.00		
							75.00	**5418.00**	**406350.00**
10	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2(P.No-13,I No-4.6)								
	Basic rate	5422.00							
	Area Weightage 3%	162.66							
	Total	**5584.66**							
		Cum							
	Honnenahalli								
	Mn Rd		2	140.00	0.20	0.10	5.60		
							5.60	**5584.66**	**31,274.10**
11	Providing and fixing pre cast solid cement concrete **kerb stones made out of C.C. 1:2:4** with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials,								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Basic rate	408.00							
	Area Weightage 3%	12.24							
	Total	**420.24**							
		Nos							
	Honnenahalli								
	Mn Rd		2	140.00			280.00		
							280.00		
							622.00	**420.24**	**261389.28**
12	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (P.No-180,I No-24.1)								
	Basic rate	80.00							
	Area Weightage 3%	2.40							
	Total	**82.40**							
		Sqm							
	Honnenahalli								
	Mn Rd		2	140.00	0.40		112.00		
							112.00	**82.40**	**9,228.80**
13	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
		Cum							
	Honnenahalli								
	Mn Rd		1	150.00	5.00	0.30	225.00		
	Krishnappa house Rd		1	50.00	4.50	0.30	67.50		
	Temple Front		1	30.00	4.00	0.30	36.00		
	Kamalamma house		1	29.00	4.50	0.30	39.15		
	Forest Rd Right side		1	90.00	6.50	0.30	175.50		
							543.15	**67.83**	**36,841.86**
14	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147)								
	Basic rate	6.00							
	Area Weightage 3%	0.18							
	Total	**6.18**							
		Sqm							
	Honnenahalli								
	Mn Rd		1	150.00	5.00		750.00		
	Krishnappa house Rd		1	50.00	4.50		225.00		
	Temple Front		1	30.00	4.00		120.00		
	Kamalamma house		1	29.00	4.50		130.50		
	Forest Rd Right side		1	90.00	6.50		585.00		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
15	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	**3692.55**							
		Cum							
	Honnenahalli								
	Mn Rd		1	150.00	5.00	0.15	112.50		
	Krishnappa house Rd		1	50.00	4.50	0.15	33.75		
	Temple Front		1	30.00	4.00	0.15	18.00		
	Kamalamma house		1	29.00	4.50	0.15	19.58		
	Forest Rd Right side		1	90.00	6.50	0.15	87.75		
							271.58	**3692.55**	**1002804.27**
16	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	**5063.48**							
		Cum							
	Honnenahalli								
	Mn Rd		1	150.00	5.00	0.15	112.50		
	Krishnappa house Rd		1	50.00	4.50	0.15	33.75		
	Temple Front		1	30.00	4.00	0.15	18.00		
	Kamalamma house		1	29.00	4.50	0.15	19.58		
	Forest Rd Right side		1	90.00	6.50	0.15	87.75		
							271.58	**5063.48**	**1375114.58**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
17	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 3%	12.87							
	Total	**441.87**							
		Sqm							
	Honnenahalli								
	Mn Rd		2	150.00	0.10		30.00		
	Krishnappa house Rd		2	50.00	0.10		10.00		
	Kamalamma house		2	29.00	0.10		5.80		
	Forest Rd Right side		2	90.00	0.10		18.00		
							63.80	**441.87**	**28,191.31**
								Total Construction Cost	**8403575.34**
								Towards GST 12%	**1008429.04**
								Tender premiun 5%	**420178.77**
								DPR and PMC Charges 2%	**167000.00**
								Sub Total	**9999183.15**
								Utility Shifting,Miscellaneous and Rounding off	**816.85**
								GRAND TOTAL	**10000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Improvements to roads and drains at Ramagondanahalli village Limits.

Est Cost: 150.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Ramgondanahalli								
	Mn Rd LHS		1	87.00	1.10	1.20	114.84		
	Chandrappa house Rd		1	80.00	1.00	0.90	72.00		
	Baiyanna house Rd		1	70.00	1.10	0.90	69.30		
	Escorts layout Rd		1	45.00	1.10	0.90	44.55		
	Aaramb Kids Maregowda house Rd		1	202.00	1.10	0.90	199.98		
	Muniyappa house Rd		1	120.00	1.10	0.90	118.80		
	Lead off Drain		1	200.00	1.60	1.40	448.00		
	Rain Water Harvesting pits		5	0.31		1.80	2.79		
	Culvert		6	8.00	1.40	0.90	60.48		
							1130.74	**216.50**	**244805.21**
2	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	1901.00							
	b) 20mm Jelly	Cum	5	0.31		0.40	**0.62**	**1901**	**1,178.62**
	Data rate	2651.00							
	c) Coarse sand.	Cum	5	0.31		0.30	**0.47**	**2651**	**1,232.72**
	Data rate	2651.00							
	d) Fine Sand	Cum	5	0.31		0.20	**0.31**	**2651**	**821.81**
	Data rate	1901.00							
	e) 12.5mm chips	Cum	5	0.31		0.30	**0.47**	**1901**	**883.97**
3	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0.**								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Deduct 12% GST	1298.68							
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		5	1.80			9.00		
							9.00	10822.32	97,400.88
4	**Providing of Geonets** for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	5	0.31			1.55	71.03	110.10
5	KSRB 2.8 : **Providing and Filling in foundation with granite / trap broken metal** 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. specification. No. KBS 2.10.2 (P.No-7,I No-2.15)								
	Basic rate	2429.00							
	Area Weightage 3%	72.87							
	Total	**2501.87**							
	CC Drain	**Cum**							
	Ramgondanahalli								
	Lead off Drain		1	200.00	1.60	0.20	64.00		
							64.00	2501.87	160119.68
6	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
	CC Drain	**Cum**							
	Ramgondanahalli								
	Mn Rd LHS		1	87.00	1.10	0.15	14.36		
	Chandrappa house Rd		1	80.00	1.00	0.15	12.00		
	Baiyanna house Rd		1	70.00	1.10	0.15	11.55		
	Escorts layout Rd		1	45.00	1.10	0.15	7.43		
	Aaramb Kids Maregowda house Rd		1	202.00	1.10	0.15	33.33		
	Muniyappa house Rd		1	120.00	1.10	0.15	19.80		
	Lead off Drain		1	200.00	1.60	0.15	48.00		
	Culvert		6	8.00	1.40	0.15	10.08		
							156.54	**5349.82**	**837460.82**
7	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Ramgondanahalli								
	Mn Rd LHS								
	Chandrappa house Rd		1	87.00	0.90	0.15	11.75		
	Baiyanna house Rd		1	80.00	0.75	0.15	9.00		
	Escorts layout Rd		1	70.00	0.90	0.15	9.45		
	Aaramb Kids Maregowda house Rd		1	45.00	0.90	0.15	6.08		
	Muniyappa house Rd		1	202.00	0.90	0.15	27.27		
	Lead off Drain		1	120.00	0.90	0.15	16.20		
	CC Drain Wall		1	200.00	1.40	0.20	56.00		
	Ramgondanahalli								
	Mn Rd LHS								
	Chandrappa house Rd		2	87.00	0.15	0.90	23.49		
	Baiyanna house Rd		2	80.00	0.15	0.60	14.40		
	Escorts layout Rd		2	70.00	0.15	0.60	12.60		
	Aaramb Kids Maregowda house Rd		2	45.00	0.15	0.60	8.10		
	Muniyappa house Rd		2	202.00	0.15	0.60	36.36		
	Lead off Drain		2	120.00	0.15	0.60	21.60		
			2	200.00	0.20	1.50	120.00		
	Culvert Raft						**372.29**		
	Culvert Wall		6	8.00	1.20	0.20	11.52		
			12	8.00	0.23	0.60	13.25		
							24.77		
							397.06	**6870.10**	**2727828.17**
8	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	**Tn**	1	372.29	60.00		22337.40		
	Consider 90kg/Cum for Drain	**Tn**	1	24.77	90.00		2229.12		
							24566.52		
							24.57	**70279.99**	**1726534.78**
9	Providing and laying **100mm thick pre-cast cover slabs** over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM of machineries, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500, 1700. (P.No-272 ,I No-37.66 of PWD BCSR 2018-19),								
	Basic rate	1081.00							
	Area Weightage 3%	32.43							
	Total	**1113.43**							
	CC Drain Top Covering Slab	m							
	Ramgondanahalli								
	Baiyanna house Rd		1	70.00			70.00		
							70.00		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Data rate	2337.00							
	CC Drain Top Covering Slab	**Sqm**							
	Ramgondanahalli								
	Mn Rd LHS		1	87.00	0.90		78.30		
	Baiyanna house Rd		1	70.00	0.90		63.00		
	Escorts layout Rd		1	45.00	0.90		40.50		
	Muniyappa house Rd		1	120.00	0.90		108.00		
	Aaramb Kids Maregowda house Rd		1	202.00	0.90		181.80		
							471.60	**2337.00**	**1102129.20**
11	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	**5418.00**							
	Culverts	**Sqm**	6	8.00	1.20		57.60		
							57.60	**5418.00**	**312076.80**
12	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301. Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
		Cum							
	Ramgondanahalli								
	Escorts layout Rd		1	56.00	4.50	0.30	75.60		
	Narasimhamurthy to Kempanna house Rd		1	78.00	3.00	0.30	70.20		
							145.80	**67.83**	**9,889.61**
13	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials upto a lead of 1000 metrers, stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202.(I No-18.47,P No-140) Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	899.00							
	Area Weightage 3%	26.97							
	Loading and Unloding & Lead	25.60							
	Total	**951.57**							
		Cum							
	Ramgondanahalli								
	Chandrappa house Rd		1	80.00	4.30	0.20	68.80		
	Somashekar house Rd		1	35.00	4.00	0.20	28.00		
	Baiyanna house Rd		1	167.00	4.40	0.20	146.96		
							243.76	**951.57**	**231954.70**
	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression								

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Area Weightage 3%	0.18							
	Total	6.18							
		Sqm							
	Ramgondanahalli								
	Chandrappa house Rd		1	80.00	4.30		344.00		
	Somashekar house Rd		1	35.00	4.00		140.00		
	Baiyanna house Rd		1	167.00	4.40		734.80		
	Escorts layout Rd		1	56.00	4.50		252.00		
	Narasimhamurthy to Kempanna house Rd		1	78.00	3.00		234.00		
							1704.80	**6.18**	**10,535.66**
15	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	3692.55							
		Cum							
	Ramgondanahalli								
	Chandrappa house Rd		1	80.00	4.30	0.15	51.60		
	Somashekar house Rd		1	35.00	4.00	0.15	21.00		
	Baiyanna house Rd		1	167.00	4.40	0.15	110.22		
	Escorts layout Rd		1	56.00	4.50	0.15	37.80		
	Narasimhamurthy to Kempanna house Rd		1	78.00	3.00	0.15	35.10		
							255.72	**3692.55**	**944258.89**
16	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to(P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	5063.48							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Chandrappa house Rd		1	80.00	4.30	0.15	51.60		
	Somashekar house Rd		1	35.00	4.00	0.15	21.00		
	Baiyanna house Rd		1	167.00	4.40	0.15	110.22		
	Escorts layout Rd		1	56.00	4.50	0.15	37.80		
	Narasimhamurthy to Kempanna house Rd		1	78.00	3.00	0.15	35.10		
							255.72	**5063.48**	**1294833.11**
17	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	Basic rate	1888.00							
	Area Weightage 3%	56.64							
	Total	**1944.64**							
		Cum							
	Ramgondanahalli, cut portion								
	Vikram house Rd		1	200.00	0.60	0.225	27.00		
	Aaramb Kids Maregowda house Rd		1	81.00	0.60	0.225	10.94		
	Rajesh house Rd		1	185.00	0.60	0.225	24.98		
							62.91	**1944.64**	**122337.30**
18	KSRRB M500-6. **Providing and applying primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	Basic rate	32.00							
	Area Weightage 3%	0.96							
	Total	**32.96**							
		Sqm							
	Ramgondanahalli								
	Vikram house Rd		1	323.00	4.60		1485.80		
	Aaramb Kids Maregowda house Rd		1	81.00	5.00		405.00		
	Rajesh house Rd		1	240.00	4.50		1080.00		
	Prakash house Rd		1	220.00	5.00		1100.00		
	Prabhakar house Rd		1	270.00	5.00		1350.00		
	Muniyappa house Rd		1	160.00	5.00		800.00		
							6220.80		
	20% Profile correction						933.12		
							933.12	**32.96**	**30,755.64**
19	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	Basic rate	7008.00							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Ramgondanahalli								
	Vikram house Rd		1	323.00	4.60	0.05	74.29		
	Aaramb Kids Maregowda house Rd		1	81.00	5.00	0.05	20.25		
	Rajesh house Rd		1	240.00	4.50	0.05	54.00		
	Prakash house Rd		1	220.00	5.00	0.05	55.00		
	Prabhakar house Rd		1	270.00	5.00	0.05	67.50		
	Muniyappa house Rd		1	160.00	5.00	0.05	40.00		
							311.04		
	20% Profile correction						46.66		
							46.66	**7218.24**	**336774.21**
20	KSRRB 500-7. **Providing and applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	Basic rate	12.00							
	Area Weightage 3%	0.36							
	Total	**12.36**							
		Sqm							
	Ramgondanahalli								
	Vikram house Rd		1	323.00	4.60		1485.80		
	Aaramb Kids Maregowda house Rd		1	81.00	5.00		405.00		
	Rajesh house Rd		1	240.00	4.50		1080.00		
	Prakash house Rd		1	220.00	5.00		1100.00		
	Prabhakar house Rd		1	270.00	5.00		1350.00		
	Muniyappa house Rd		1	160.00	5.00		800.00		
							6220.80	**12.36**	**76,889.09**
21	Providing and laying **bituminous concrete 40mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)(P.No-171,I No-21.78.12)								
	Basic rate	8207.00							
	Area Weightage 3%	246.21							
	Total	**8453.21**							
		Cum							
	Ramgondanahalli								
	Vikram house Rd		1	323.00	4.60	0.04	59.43		
	Aaramb Kids Maregowda house Rd		1	81.00	5.00	0.04	16.20		
	Rajesh house Rd		1	240.00	4.50	0.04	43.20		
	Prakash house Rd		1	220.00	5.00	0.04	44.00		
	Prabhakar house Rd		1	270.00	5.00	0.04	54.00		
	Muniyappa house Rd		1	160.00	5.00	0.04	32.00		
							248.83	**8453.21**	**2103429.15**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
22	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	Basic rate	429.00							
	Area Weightage 3%	12.87							
	Total	441.87							
		Sqm							
	Ramgondanahalli								
	Vikram house Rd		2	323.00	0.10		64.60		
	Aaramb Kids Maregowda house Rd		2	81.00	0.10		16.20		
	Rajesh house Rd		2	240.00	0.10		48.00		
	Prakash house Rd		2	220.00	0.10		44.00		
	Prabhakar house Rd		2	270.00	0.10		54.00		
	Muniyappa house Rd		2	160.00	0.10		32.00		
	Laxmi venkateshwara Provision store rd		2	300.00	0.10		60.00		
	Raju house Rd		2	57.00	0.10		11.40		
	Muneshwara temple Rd		2	120.00	0.10		24.00		
							354.20	441.87	156510.35
								Total Construction Cost	12609869.19
								Towards GST 12%	1513184.30
								Tender premiun 5%	630493.46
								DPR and PMC Charges 2%	246000.00
								Sub Total	14999546.95
								Utility Shifting,Miscellaneous and Rounding off	453.05
								GRAND TOTAL	15000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, issue rates dated 21-10-2019 and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore

BRUHAT BANGALORE MAHANAGARA PALIKE

DETAILED ESTIMATE

Name of Work: Providing Asphalting and Improvements to drains at Kondappa layout Kamakshamma layout Chowdeshwari layout main and cross roads in Chowdeshwari ward no -02 of Yelahanak Sub division

Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work: Providing Asphalting and Improvements to drains at Kondappa layout Kamakshamma layout Chowdeshwari layout main and cross roads in Chowdeshwari ward no -02 of Yelahanak Sub division

Est Cost: 200.00 Lakhs

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Civil Work								
1	**Removing and refixing stone slabs** of drains and pointing in CM (1:3) (P.No-27,I No-5.33)								
	Basic rate	105.00							
	Area Weightage 3%	3.15							
	Total	**108.15**							
	For Drain Desilt	**Sqm**							
	Chowdeshawari layout								
	3rd A cross rd, Cross road-2		2	52.00	0.75		78.00		
	near markendeya temple rd		1	42.00	0.75		31.50		
							109.50		
	consider 30% for missing slab						32.85		
							76.65	108.15	**8289.70**
2	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications (I No-19.1,P No-141), 10km lead = (1.28x2x10)+57.								
	Basic rate	130.00							
	Area Weightage 3%	3.90							
	10km, Loading and Unloding & Lead	82.60							
	Total	**216.50**							
	CC Drain	**Cum**							
	Chowdeshawari layout								
	1st cross rd		1	69.00	1.00	0.90	62.10		
	3rd A cross rd		1	74.00	1.00	0.90	66.60		
	cross rd-1		1	62.00	1.00	1.00	62.00		
	6th cross rd		2	32.00	1.00	1.00	64.00		
			1	12.00	1.00	1.00	12.00		
	Kondappa layout								
	near Jnanabharathi public school		1	41.00	1.00	1.00	41.00		
	opposite to Jnanabharathi public school								
	cross rd-1		1	37.00	1.00	1.00	37.00		
	cross rd-2		2	21.00	1.00	1.00	42.00		
	29th cross rd		1	100.00	1.10	1.00	110.00		
	From 19th cross rd to 25th cross rd		1	172.00	1.10	1.00	189.20		
	Cross Rd		1	134.00	1.10	1.00	147.40		
	For Drain Desilt								
	Chowdeshawari layout								
	3rd A cross rd, Cross road-2		2	52.00	0.45	0.50	23.40		
	near markendeya temple rd		1	42.00	0.45	0.50	9.45		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Culverts		12	7.00	1.50	0.90	113.40		
							987.94	216.50	213888.58
3	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications. Data Rate								
	Data rate	1901.00							
	a) 40mm Jelly	Cum	6	0.31		0.40	0.74	1901	1,414.34
	Data rate	1901.00							
	b) 20mm Jelly	Cum	6	0.31		0.40	0.74	1901	1,414.34
	Data rate	2651.00							
	c) Coarse sand.	Cum	6	0.31		0.30	0.56	2651	1,479.26
	Data rate	2651.00							
	d) Fine Sand	Cum	6	0.31		0.20	0.37	2651	986.17
	Data rate	1901.00							
	e) 12.5mm chips	Cum	6	0.31		0.30	0.56	1901	1,060.76
4	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : **HDPE Grade PE80-PN6.0, 630 mm dia.** (Perforated Pipe for Rain Water Harvesting Pit) (BWSSB SR 2017-18, Pg No 121 Item No. 1.17 Code No. K010Q)								
	Basic rate	12121.00							
	Deduct 12% GST	1298.68							
	Total	10822.32							
		Rmt							
	0.63m dia HDPE Perforated Pipe. For 1.8 Mtr depth,		6	1.80			10.80		
							10.80	10822.32	116881.06
5	**Providing of Geonets** for Rain Water Harvesting pit on top of the filter media as specified indrawings or as approved by Engineer Incharge. Data Rate								
	Data rate	71.03							
		Sqm	6	0.31			1.86	71.03	132.12
6	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. (P.No-13,I No-4.2,KPWD SR 2018-19)								
	Basic rate	5194.00							
	Area Weightage 3%	155.82							
	Total	**5349.82**							
		Cum							
	CC Drain								
	Chowdeshawari layout		1	69.00	1.00	0.15	10.35		
	1st cross rd		1	74.00	1.00	0.15	11.10		
	2nd A cross rd		1	62.00	1.00	0.15	9.30		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Kondappa layout						0.00		
	near Jnanabharathi public school		1	41.00	1.00	0.15	6.15		
	opposite to Jnanabharathi public school						0.00		
	cross rd-1		1	37.00	1.00	0.15	5.55		
	cross rd-2		2	21.00	1.00	0.15	6.30		
	29th cross rd		1	100.00	1.10	0.15	16.50		
	From 19th cross rd to 25th cross rd		1	172.00	1.10	0.15	28.38		
	Cross Rd		1	134.00	1.10	0.15	22.11		
	Culverts		12	7.00	1.50	0.15	18.90		
							146.04	**5349.82**	**781287.71**
7	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Basic rate	6670.00							
	Area Weightage 3%	200.10							
	Total	**6870.10**							
	CC Drain Raft	**Cum**							
	Chowdeshawari layout								
	1st cross rd		1	69.00	0.75	0.15	7.76		
	3rd A cross rd		1	74.00	0.75	0.15	8.33		
	cross rd-1		1	62.00	0.75	0.15	6.98		
	6th cross rd		2	32.00	0.75	0.15	7.20		
			1	12.00	0.75	0.15	1.35		
	Kondappa layout								
	near Jnanabharathi public school		1	41.00	0.75	0.15	4.61		
	opposite to Jnanabharathi public school								
	cross rd-1		1	37.00	0.75	0.15	4.16		
	cross rd-2		2	21.00	0.75	0.15	4.73		
	29th cross rd		1	100.00	0.90	0.15	13.50		
	From 19th cross rd to 25th cross rd		1	172.00	0.90	0.15	23.22		
	Cross Rd		1	134.00	0.90	0.15	18.09		
	CC Drain Wall								
	Chowdeshawari layout								
	1st cross rd		2	69.00	0.15	0.60	12.42		
	3rd A cross rd		2	74.00	0.15	0.60	13.32		
	cross rd-1		2	62.00	0.15	0.60	11.16		
	6th cross rd		4	32.00	0.15	0.60	11.52		
			2	12.00	0.15	0.60	2.16		
	Kondappa layout								
	near Jnanabharathi public school		2	41.00	0.15	0.60	7.38		
	opposite to Jnanabharathi public school								
	cross rd-1		2	37.00	0.15	0.60	6.66		
			4	21.00	0.15	0.60	7.56		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Culverts						245.18		
	Culverts Wall		12	7.00	1.20	0.23	23.18		
			24	7.00	0.23	0.60	23.18		
							46.37		
							291.55	6870.10	2002981.09
8	KSRRB M2200-6. **Providing T.M.T. steel reinforcement** for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200(I No-28.8.2,P No-229)								
	Basic rate	68233.00							
	Area Weightage 3%	2046.99							
	Total	**70279.99**							
	Consider 60kg/Cum for Drain	**Tn**	1	245.18	60.00		14710.95		
	Consider 90kg/Cum for Drain		1	46.37	90.00		4173.12		
							18884.07		
							18.88	**70279.99**	**1327172.25**
9	Providing and laying **100mm thick pre-cast cover slabs** over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM of machineries, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500, 1700. (P.No-272 ,I No-37.66 of PWD BCSR 2018-19),								
	Basic rate	1081.00							
	Area Weightage 3%	32.43							
	Total	**1113.43**							
	CC Drain Top Covering Slab	**m**							
	missing/damged								
	Chowdeshawari layout						32.85		
	1st cross rd		1	69.00			69.00		
	3rd A cross rd		1	74.00			74.00		
	cross rd-1		1	62.00			62.00		
	6th cross rd		2	32.00			64.00		
			1	12.00			12.00		
	Kondappa layout								
	near Jnanabharathi public school		1	41.00			41.00		
	opposite to Jnanabharathi public school								
	cross rd-1		1	37.00			37.00		
	cross rd-2		2	21.00			42.00		
							433.85	**1113.43**	**483061.61**
10	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with **10cm thick** and Finishing cutting , including form work, cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Data rate	2337.00							
	CC Drain Top Covering Slab	**Sqm**							
	Chowdeshawari layout								
	29th cross rd		1	100.00	0.90		90.00		
	25th cross rd		1	172.00	0.90		154.80		

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
11	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Data rate	5418.00							
	Culverts	Sqm	12	7.00	1.20		100.80		
							100.80	**5418.00**	**546134.40**
12	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143) 10km lead = (1.28x2x10)								
	Basic rate	41.00							
	Area Weightage 3%	1.23							
	Loading and Unloding & Lead	25.60							
	Total	**67.83**							
	For CC road	**Cum**							
	Chowdeshwari Layout								
	6th cross		1	32.00	4.50	0.30	43.20		
	Kondappa Layout								
	16th cross, Cross Rd -1		1	50.00	3.00	0.30	45.00		
	Near Jnanabharathi Public School		1	41.00	9.00	0.30	110.70		
	Opp. To Jnana Bharathi Public School, cross road 2		1	21.00	5.50	0.30	34.65		
							233.55	**67.83**	**15,841.70**
13	KSRRB M200-24. **Dismantling of cement concrete pavement** by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202Loading and unloading with 8km lead= (I No-18.47,P No-140)								
	Basic rate	899.00							
	Area Weightage 3%	26.97							
	Loading and Unloding & Lead	25.60							
	Total	**951.57**							
	For CC road	**Cum**							
	Chowdeshwari Layout								
	3rd A cross, Cross Road-1		1	61.00	4.60	0.20	56.12		
	Near Markandaiah temple		1	42.00	3.60	0.20	30.24		
	Kondappa Layout								
	Opp. To Jnana Bharathi Public School, cross road 1		1	62.00	3.70	0.20	45.88		
							132.24	**951.57**	**125835.62**
14	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications. MORTH / Chapter 3 (I No-19.64,P No-147)								
	Basic rate	6.00							
	Area Weightage 3%	0.18							
	Total	**6.18**							

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	3rd A cross, Cross Road-1		1	61.00	4.60		280.60		
	Near Markandaiah temple		1	42.00	3.60		151.20		
	Kondappa Layout								
	Opp. To Jnana Bharathi Public School, cross road 1		1	62.00	3.70		229.40		
	Chowdeshwari Layout								
	6th cross		1	32.00	4.50		144.00		
	Kondappa Layout								
	16th cross, Cross Rd -1		1	50.00	3.00		150.00		
	Near Jnanabharathi Public School		1	41.00	9.00		369.00		
	Opp. To Jnana Bharathi Public School, cross road 2		1	21.00	5.50		115.50		
							1439.70	**6.18**	**8,897.35**
15	KSRRB M600-1.Providing and **Constructing dry lean cement concrete** mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5. with OPC at 150 kg/cum and coarse aggregate .86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with Slip form paver with electronic sensor. (I No-22.1,P No-174)								
	Basic rate	3585.00							
	Area Weightage 3%	107.55							
	Total	**3692.55**							
	For CC road	**Cum**							
	Chowdeshwari Layout								
	6th cross		1	32.00	4.50	0.15	21.60		
	Near Markandaiah temple		1	42.00	3.60	0.15	22.68		
	3rd A cross, Cross Road-1		1	61.00	4.60	0.15	42.09		
	Kondappa Layout								
	16th cross, Cross Rd -1		1	50.00	3.00	0.15	22.50		
	Near Jnanabharathi Public School		1	41.00	9.00	0.15	55.35		
	Opp. To Jnana Bharathi Public School, cross road 1		1	62.00	3.70	0.15	34.41		
	Opp. To Jnana Bharathi Public School, cross road 2		1	21.00	5.50	0.15	17.33		
							215.96	**3692.55**	**797424.64**

Sl No	Description of Item	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
16	**Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30** with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	Area Weightage 3%	147.48							
	Total	**5063.48**							
	For CC road	**Cum**							
	Chowdeshwari Layout								
	6th cross		1	32.00	4.50	0.15	21.60		
	Near Markandaiah temple		1	42.00	3.60	0.15	22.68		
	3rd A cross, Cross Road-1		1	61.00	4.60	0.15	42.09		
	Kondappa Layout								
	16th cross, Cross Rd -1		1	50.00	3.00	0.15	22.50		
	Near Jnanabharathi Public School		1	41.00	9.00	0.15	55.35		
	Opp. To Jnana Bharathi Public School, cross road 1		1	62.00	3.70	0.15	34.41		
	Opp. To Jnana Bharathi Public School, cross road 2		1	21.00	5.50	0.15	17.33		
							215.96	**5063.48**	**1093483.82**
								Total Construction Cost	**8381606.32**
								Towards GST 12%	**1005792.76**
								Tender premiun 5%	**419080.32**
								DPR and PMC Charges 2%	**193000.00**
								Sub Total	**9999479.39**
								Utility Shifting,Miscellaneous and Rounding off	**520.61**
								GRAND TOTAL	**10000000.00**

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates

Assistant Engineer

Asst. Executive Engineer

Executive Engineer
Yelahanka Division
BBMP Bangalore